

Statement of Basis MOBIS ALABAMA, LLC
(Automotive Parts & Surface Coating Processes)
Major Source of Hazardous Air Pollutant Emissions

Introduction

On July 23, 2015, MOBIS Alabama, LLC, (Mobis), submitted a Title V major source permit initial application for the manufacture and surface coating of automotive parts (SIC # 3089). Mobis is located in Montgomery, Alabama. This initial permit issuance will not add or remove any permitted units.

Operation

Plastic automobile parts are injected molded using large presses. Workpieces are then conveyed through the coating process by means of a monorail system. The part is flame treated to promote adhesion. After the adhesion step, one or more coats of primer (color basecoat) are added. Finally, one or more topcoats (clearcoats) are applied. Natural gas fired ovens follow the application of the primer and topcoat.

Mobis has injection molding operations, Main Coating Line No. 1 with RTO (X001), Main Coating Line No. 2 with RTO (X002), five natural gas fired Boilers and three natural gas fired Burn Off Ovens (X003), Soft-Touch Coating Line with RTO (X004), E-Coating Line with RTO (X005), and Fire Pumps and Emergency Generators (X007).

Regulations

Title V:

The regulated criteria air contaminants emitted into the atmosphere by the surface coating of the automotive parts are volatile organic compounds (VOC) which comes from the organic solvents in the paint, paint thinners, and cleanup solvents. The operations are also a source of hazardous air pollutants (HAPs) as listed in Appendix G of the ADEM Air Regulations.

The potential emissions of VOCs exceed the threshold of 100 tons per year. Therefore, Mobis is considered a major source for Title V.

The potential HAP emissions from the coating operation would also be emitted in such quantities as to exceed the Title III and Title V major source thresholds. The HAP emission thresholds for a major

source are 10 tons for a single HAP and 25 tons for a combination of any HAPs.

PSD:

Mobis current permits limit their VOC emissions to 235 TPY to restrict their potential emissions of criteria pollutants (VOCs) to below major source thresholds for PSD purposes. Mobis would remain a minor source in respect to PSD after this permitting procedure.

NSPS:

Mobis has five natural gas fired boilers to supply heat for their operation. Two of these boilers are subject to 40 CFR 60, Subpart Dc, Standards of Performance for New Stationary Sources: Small Industrial – Commercial – Institutional Steam Generating Units. These boilers are subject to NSPS recordkeeping requirements.

MACT:

The five boilers are subject to 40 CFR 63, Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers for Major Sources. Because all of the units are fueled only with natural gas, the two larger units are subject to an annual tune-up and one-time energy assessment. The three smaller units are subject to a biennial tune-up.

There is an applicable MACT standard for plastic parts surface coating (Part 63 Subpart PPPP), and they will be an existing source for applicability. Units X001, X002, X004, and X005 will be subject to this regulation. In order to comply with this regulation, they use an RTO and certain coatings to meet the limit of 0.16 pound organic HAP emitted per pound of coating solids on a monthly basis. The RTOs are also used to comply with their synthetic minor PSD limit.

The emergency generator and fire-pump are subject to an applicable MACT standard for Stationary Reciprocating Internal Combustion Engines (Part 63 Subpart ZZZZ), and they will meet this regulation by complying with 40 CFR Part 60 (III) (Stationary Compression Ignition Internal Combustion Engines). The emergency generators and fire-pump are certified to meet the standards listed in the Provisos. According to 60.4207, the engines must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel. According to 60.4209(a), the engines must have a non-resettable

hour meter. The emergency generator will be operated and maintained in compliance with the manufacturer's emission-related written instructions and records will be kept of conducted maintenance.

There are no other MACT standards, New Source Performance Standards (NSPS), or other state regulations applicable to this facility. An Air Toxics review was conducted previously.

CAM

Mobis will meet the Compliance Assurance Monitoring (CAM) requirements through compliance with the proposed post November 15, 1990 NESHAP (MACT) (Plastic Parts) regulations within this permit.

Following the MACT requirements should be sufficient to meet the CAM monitoring for VOCs. For the thermal oxidizer, the minimum set-point temperature of the combustion chamber was set by performance testing. The temperature will be monitored and recorded continuously using a thermocouple and chart. This facility shall maintain emission records and supporting background documents to this Department and submit records that pertain to their Major Source Operating Permit (MSOP) whenever requested.

Compliance Assurance Monitoring (CAM) is not applicable for the other units listed herein because potential uncontrolled emissions of criteria pollutants do not exceed 100 tons per year on any one unit with control device(s).

The following is a list of all of the facility's sources (individual emissions units) which will be part of the facility's Title V Major Source Operating Permit:

Permit Unit No.	Description of Unit
001	Main Coating Line No. 1 with RTO
002	Main Coating Line No. 2 with RTO

003	10.04 MMBTU/Hr Natural Gas Fired Boiler (BL1) 4.18 MMBTU/Hr Natural Gas Fired Boiler (BL2) 11.72 MMBTU/Hr Natural Gas Fired Boiler (BL3) 8.37 MMBTU/Hr Natural Gas Fired Boiler (BL4) 8.37 MMBTU/Hr Natural Gas Fired Boiler (BL5) 1.0 MMBTU/Hr Natural Gas Fired Rack Cleaning Oven (PL1) 1.0 MMBTU/Hr Natural Gas Fired Rack Cleaning Oven (PL2) 1.0 MMBTU/Hr Natural Gas Fired Rack Cleaning Oven (PL4)
004	Soft-Touch Coating Line with RTO
005	E-Coat Line with RTO
007	293 HP Diesel Fired Fire Pump Engine (FP1) 909 HP Diesel Fired Emergency Generator (EG1) 909 HP Diesel Fired Emergency Generator (EG2)

Monitoring of Emissions

Mobis will maintain records of monthly coating usage and coating analysis to show compliance with their synthetic minor PSD limits. These will be submitted quarterly.

The boilers are natural gas fired. Due to the clean nature of burning these fuels, no monitoring of emissions will be done. However, these units are subject to NSPS Dc regulations which require record keeping of fuel usage on a monthly basis.

Due to the burning of natural gas in the boilers, SO₂ generation is expected to be nominal. Therefore, no monitoring of SO₂ will be required.

The coating line is controlled by a thermal oxidizer. This oxidizer is for the control of VOCs and will have its operational temperature monitored and recorded for compliance with their facility wide VOC

limit. Due to the inherent nature of the fuels and vapors in this incinerator, additional monitoring of opacity and particulates from the unit would not be required.

Permitting Fees

Title V major sources are subject to operating permit fees which charge the facility a yearly amount based on the actual emission rate of pollutants for the previous year.

Affected States Notification

No notification of the issuance of this major source operating permit to any affected state bordering Alabama is necessary since all states are notified automatically when the public notice is issued.

Recommendations

I recommend that the attached permit be issued to Mobis.

Kevin Fulmer
Chemical Branch
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